WHAT THE HEALTH SECTOR NEEDS TO IMPLEMENT BEST PRACTICES FOR ASTHMA:

A PERSPECTIVE FROM PROVIDERS

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In a process beginning in March 2008, Massachusetts nurses and doctors came together, facilitated by the Asthma Regional Council and University of Massachusetts Lowell, to discuss the urgent need for action to reduce the burden of asthma. We work in hospitals, large and small practices, community health centers and schools. Some of us are primary care practitioners; others are specialists, program directors and researchers. Taking into account the recent update of the National Asthma Management Guidelines and our experience with a range of programs to support patients in keeping their asthma under control, and with particular focus on the disproportionate impact of asthma on low income people and racial and ethnic minorities, we concurred that immediate steps by institutions paying for and providing care must occur to more widely implement best practices and begin to reverse the asthma epidemic.

Our consensus recommendations are grounded in the following realities, well-established in the literature and via public health surveillance:

- Effective implementation of best practices for asthma requires interventions in three areas: 1) clinical care; 2) patient and provider education; 3) work, home, school and community environments. It also requires coordination and integration of these services, and ready access to relevant data.
- Asthma is a persistent problem with disparate burdens that need to be proactively addressed. Populations that suffer disproportionately include low-income people, some minorities, and the elderly.
- Best practices that implement the National Asthma Management Guidelines (NAEPP) can decrease the frequency of asthma attacks, as well as high costs associated with asthma care.
- Best practices can occur in a variety of settings, but include the establishment of a Medical Home for patients with asthma. A Medical Home provides health care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective.¹
- The Chronic Care Model, which identifies “change concepts” for elements of the health care system essential to high-quality chronic disease care and encourages patients to take an active role in their care, is a useful framework for effective management of asthma.²

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¹ It is increasingly understood and accepted that successful prevention and management of chronic disease requires action at multiple levels to address medical, social and environmental factors. A Medical Home is a partnership with patients and families that promotes access to all of needed services and community supports. Providing a Medical Home requires change on a systems level, including practice changes as well as improved communication and collaboration with patients, families, schools, specialists, and community agencies. An important step in promoting the Medical Home in healthcare is the joint statement by the American Academy of Family Physicians, American College of Physicians, American Osteopathic Association and American Academy of Pediatrics: “Joint Principles of the Patient-Centered Medical Home.” (March, 2007, PDF file: 3 pages.)
² See Wagner EH. Chronic disease management: what will it take to improve care for chronic illness? Effective Clinical Practice 1998;1:2-4 Additional information is at http://www.improvingchroniccare.org
Many people with asthma are not receiving the interventions and services they need. There are a variety of reasons for this, many of which can be addressed with concerted action. They include: insufficient and inconsistent reimbursement policies and practices—especially in regard to education and home-based services; expensive controller medications; gaps in training and knowledge among providers; lack of a reliable supply of services and materials for interventions outside of the doctor’s office; lack of electronic decision support and clinical information systems; low expectations for asthma control by patients and their families, and a lack of proactive case management services for those at highest risk and need.

We call on payers, health systems, our provider colleagues, public agencies and the legislature to take the following steps to align policies and programs with best practices and provide needed resources.

We are confident that action on the recommendations that follow will result in the delivery of high quality prevention-oriented health care, cost-savings, and improvements in quality of life for thousands of people with asthma.

**RECOMMENDATIONS FOR PAYERS**

Through policies and programs, payers have a central role to play in promoting and supporting best practices for asthma. Decisions to reimburse for necessary services and supplies known to benefit patients—and shown increasingly to be cost-effective—are paramount, but payers can also provide direct services, and establish incentives and support for multi-faceted quality care.

**Align payment for, and facilitate access to, services and medications consistent with the National Asthma Education and Prevention Program (NAEPP) Expert Panel Guidelines.** Payers should be knowledgeable about these Guidelines and provide incentives for providers and patients to follow them. Currently there are financial barriers to patients receiving proper care to control their disease. These include unaffordable co-payments for medications and lack of consistent reimbursement policies and practices that would allow for clinicians to directly, or via referral, provide needed specialty consultation, case management, educational and environmental services in a variety of settings.

Recommendations to support best practices for each of the Guideline components are:

- **Measures of assessment and monitoring.** To promote correct diagnosis and monitoring of symptoms, payers should help providers secure appropriate equipment and reimburse sufficiently for:
  - pulmonary function testing, conducted in laboratories or in a clinical setting
  - peak flow meters for those patients for whom peak flow is a reliable indicator of asthma control.

- **Education for a partnership in asthma care.** Payers should provide and/or reimburse for asthma education, including:
longer office visits with primary care providers
mechanisms for proactive follow-up
case management for high risk patients
reinforcement sessions with asthma educators in the clinic, home, school, workplace, or community.

Control of environmental factors and co-morbid conditions that affect asthma. Payers should reimburse for environmental services and supplies in the home as appropriate and needed. They should also remove financial barriers and promote coordination and collaboration among providers caring for patients with other conditions that affect asthma, such as obesity and allergies.

Pharmacologic therapy. To enable people with asthma to secure needed medications, payers should:
reduce or eliminate co-pays, and/or redesign drug formularies to ensure that brand name drugs needed by the patient and/or for which there are no generic alternatives are placed in a lower-cost category.
reimburse for multiple prescriptions for inhalers, so patients can have them at school, at work, and at more than one home, in cases where they live in more than one place.

Reimburse and facilitate billing for multiple kinds of providers most appropriate for a given setting and service, where evidence shows effectiveness and providers meet high standards. Providers could be practicing in a clinic, home, workplace, community or school.

Work with health systems to establish robust disease management programs, based on a chronic disease model of care, that include:
asthma registries, which are repositories of relevant information on individual patients and groups of patients that can be accessed and used by the range of caregivers involved in managing a patient’s asthma
clinical decision-support mechanisms that help providers make treatment decisions against benchmarks for best practices
case managers based in clinical practice settings who coordinate care.

Help establish and promote organizations that provide comprehensive asthma management services to ensure sufficient supply.

Support and participate in the development of:
pilot projects and/or organizations that deliver comprehensive asthma management. Track cost and health benefits to inform decision-making about longer-term investments
collaborative efforts to establish standards and provide training so that services are of high quality.
Encourage referrals to organizations that provide comprehensive asthma management services.

3 e.g., smoking cessation programs and associated pharmacotherapy; mattress/pillow covers; HEPA air and vacuum filters; home assessments; integrated pest management supplies and, where needed, professional services.
RECOMMENDATIONS FOR PROVIDERS & HEALTH SYSTEMS

Through their practices, and through programs and policies of organizations in which they work (e.g., health delivery systems, community health centers, schools, hospitals), providers play a key role in promoting the implementation of best practices.

Ensure full understanding and implementation among providers of the NAEPP Guidelines and the research and practice literature on promising interventions. Primary care and other providers should take advantage of professional education opportunities for keeping current on the latest science on best practices, including:

- diagnosis criteria
- the importance of pulmonary function testing and interpretation of results;
- appropriate medications
- the benefits of asthma education
- the potential for home visits to benefit patients whose asthma is not well-controlled
- the role of workplace exposures in asthma onset and exacerbation.

Promote quality improvement measures that improve assessment and control of asthma, in particular:

- Promote and use disease management tools including asthma registries and clinical decision-support mechanisms (see above).
- Connect patients with case managers who help them gain access to the referrals, services and community resources they may need (e.g., mental health; legal services).
- Use spirometry appropriately and on a regular basis, and take time to demonstrate and/or recheck proper use of inhaler devices.
- Use written asthma management plans.
- Offer flu shots.
- Communicate with the patient’s regular care providers for timely and appropriate follow-up when urgent care is utilized.
- Initiate and maintain communication with the patient’s school nurse.
- Offer to assist patients in communications with their employers about options for reducing exposure to asthma triggers in the workplace.
- Ensure that staff and those to whom patients are referred are appropriately trained and culturally competent.
- Seek patient and family input, via a Family Advisory Board, for example.

Facilitate patients’ access to asthma education, home visiting, environmental intervention services and supplies, and workplace exposure information as appropriate and needed.

- Provide or facilitate patients’ access to asthma education and proactive follow-up.
- Make available materials that are in the language of the patient and appropriate for low literacy levels and varied learning styles.
• Make referrals to case management and home-based services, materials and supplies to reduce home triggers on behalf of patients who could benefit.
• Request insurance coverage for those services that are not routinely reimbursed by payers.
• Inquire about workplace exposures that could be related to a patient’s asthma and assist him or her in resolving an identified problem so s/he is no longer exposed.
• Report cases of work-related asthma to the Department of Public Health.

RECOMMENDATIONS FOR PUBLIC AGENCIES

Public agencies at the local, state and federal levels can play important roles in mitigating the social and environmental conditions that contribute to asthma, and in promoting best practices. While public agencies can carry out some of the same functions as medical practitioners, they are uniquely capable of establishing population-level approaches and capacity for implementing particular kinds of interventions. They can also take leadership in reducing the fragmentation of health care delivery and financing, which often undermines quality of care. The recommendations that follow envision partnerships between public agencies, payers, providers/health systems, schools and community organizations.

The Departments and Divisions within the The Massachusetts Executive Office of Health and Human Services and other state agencies, along with non-governmental health care financing and health quality organizations and in conjunction with the legislature where resources are needed, should work together to strengthen capacity for preventive services that pay particular attention to highest need populations.

More specifically, relevant agencies should aspire to:

• Pursue opportunities for better tracking of statistics on asthma and asthma management services to fill important gaps in information, such as trends in the quality of implementation of the NAEPP Guidelines. Potential tracking initiatives could include: encouraging data sharing among public agencies as appropriate and needed; expanding existing statewide survey tools; and promoting practice-level asthma registries with common data elements, as well as links between these registries and health departments so that data inform public health planning in addition to health care delivery.
• Reduce fragmentation and facilitate consistent access to needed services and supplies across the population. For example, articulate minimum services needed to provide effective asthma management, and minimum public and private insurance benefits necessary to access these services.
• Build capacity in localities to deliver or promote proven models for home visiting, education, and provision of appropriate materials, supplies and other needed services. Such models exist in many places in or near Massachusetts, including Connecticut, Boston and Cambridge, for example.
• Work with payers to develop standards and training programs for the delivery of community and home-based services for which there is insufficient supply.
• Promote sustained communication between those providing community-based services, including local public health agencies, community-based organization and schools, and the patient’s primary care physician or care coordinator/case manager.
• Provide guidance on asthma management in schools and resource school nurses sufficiently so they can maximize their effectiveness in monitoring and controlling students’ asthma.

• Increase awareness of work-related asthma among providers, among employers through wellness campaigns, and among employees through collaboration with unions and other organizations.

• Make the primary prevention of asthma a priority by coordinating the development of a Roadmap or Agenda for reducing asthma incidence in Massachusetts through research and policy which could be implemented over time. Elements could include research priorities, as well as analysis and promotion of alternatives to known asthmagens.

Public agencies should identify, strengthen where needed and enforce laws and regulations aimed at preventing exposures and otherwise improving social and environmental conditions.

• The MA Department of Public Health should encourage and provide guidance to cities and towns to ensure that their sanitary and housing codes give them the enforcement tools they need to address priority asthma problems, such as remediating homes with leaks and mold, and rodent control. It should also encourage local code enforcement.

• The MA Department of Public Health, the Division of Occupational Safety (DOS) at the MA Department of Labor and Workforce Development, and the federal Occupational Safety and Health Administration (OSHA) should separately and together enhance their efforts to reduce the risk of asthma onset and exacerbations in the workplace through enforcement, consultation, and education with the goal of protecting both public and private sector workers. Where standards do not exist, state governments should ensure protection and recourses for those affected.

• The Department of Public Health should explore issuing indoor air quality standards for all buildings.

• The Department of Environmental Protection and the MA Executive Office of Environmental Affairs, in collaboration with U.S. Environmental Protection Agency, should ensure that all communities meet national ambient air quality standards, and enhance programs to improve air quality (e.g., anti-idling, diesel retrofits, wood smoke, etc.).

This consensus statement grew out of discussions among asthma clinicians who met in Framingham, Massachusetts, in March 2008, to begin to develop the framework and content of this document. At a conference of 100 asthma providers and leaders in June 2008, attendees commented on the recommendations, which were further refined by the Drafting Committee and the Project Coordinators. The Coordinators gratefully acknowledge the funders of this effort: The Boston Foundation, the New England regional offices of the U.S. Department of Health and Human Services and the Environmental Protection Agency, and the University of Massachusetts Lowell. We want to specifically thank Betsy Rosenfeld at DHHS (Reg. I), Marybeth Smuts at EPA (Reg. I,) Cheryl Bartlett, Suzanne Condon, Elise Pechter and Jean Zotter at the Massachusetts Department of Public Health, and Dean David Wegman of the School of Health and Environment, University of Massachusetts, Lowell for their valuable guidance and support.